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Antonio Ascolese

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EXAMINER

CHAMBERS, TANGELA T

ART UNIT

PAPER NUMBER

4141

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,927	<b>Applicant(s)</b> ASCOLESE ET AL.	
	<b>Examiner</b> TANGELA T. CHAMBERS	<b>Art Unit</b> 4141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>January 6, 2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the preliminary amendment filed on 12/30/2005.
2. Claims 1-32 have been canceled.
3. Claims 33-64 have been added.
4. Claims 33-64 are pending.

#### ***Priority***

5. Acknowledgment is made of applicant's domestic priority which provides applicant a priority date of June 30, 2003.

#### ***Information Disclosure Statement***

6. The IDS filed on January 6, 2006 has been acknowledged by the examiner.

#### ***Drawings***

7. **The drawings are objected to because of the following informalities:**

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 4: steps 1-6, HauS A, HauS B, VauS A, VauS B and Figure 7: steps 1-8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid

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abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

**8. The disclosure is objected to because of the following informalities:**

Page 1, line 7, the first occurrence of the acronym "IP" should be spelled out with the acronym appearing in parenthesis.

Page 3, lines 10-11, Page 3, lines 16-17, Page 4, line 33, Page 5, line 33, Page 6, lines 19-20, Page 11, lines 18-19 and Page 11, lines 23-24 each contain a hyperlink. USPTO policy does not permit links to any commercial sites within the specification as the USPTO exercises no control over the organization, views or accuracy of the information contained on these outside sites.

Page 4, line 2 recites the word "decentralised" which should be replaced with the following spelling – decentralized –.

Page 4, line 15 the word "of" should be deleted for reading clarity.

Page 5, line 17 recites "Those of skill in the art" which should be replaced with "Those of ordinary skill in the art".

Page 5, line 23 recites the word "behaviour" which should be replaced with the following spelling – behavior –.

Page 6, line 6 and Page 11, line 11 recite the word "indipendently" which appears to be a misspelling of the word "independently".

Page 8, line 15 recites the word "generalised" which should be replaced with the following spelling – generalized –.

Page 9, line 8 recites the word "utilise" which should be replaced with the following spelling – utilize –.

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Page 10, line 8 and Page 10, line 12 recite the word “signalling” which appears to be a misspelling of the word “signaling”.

Page 10, line 31 contains the drawing label "SSIDas" which appears to be a misspelling of "SSIDs".

Page 10, line 34 recites the word “possbily” which appears to be a misspelling of the word “possibly”.

Page 12, line 15 recites the word “tecnology” which appears to be a misspelling of the word “technology”.

Page 15, line 19 contains the drawing label "Vaus" which appears to be referring to the drawing element "VauS".

Page 15, line 20 recites the word “spedified” which appears to be a misspelling of the word “specified”.

Appropriate corrections are required.

### ***Claim Objections***

**9. The claims are objected to because of the following informalities:**

Claim 33 is objected to because there should be a colon (:) after the word “of” in the third line of the claim.

Claims 37 and 52 are objected to because the first occurrence of the acronym “NAI” should be spelled out with the acronym appearing in parenthesis.

Claims 42 and 57 are objected to because the first occurrence of the acronym “EAP” should be spelled out with the acronym appearing in parenthesis.

Claim 56 is objected to because the claim recites the word “aid” appears to be a misspelling of the word “said”.

Claim 63 is objected to because the first occurrence of the acronym “IP” should be spelled out with the acronym appearing in parenthesis.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 101***

10. The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 64 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 64 is non-statutory because it recites a computer program per se representing functional descriptive material without a computer and/or a computer readable medium. It is suggested that claim 64 be amended to recite a computer-implemented method including at least some of the claimed steps to be performed by a computer.

***Claim Rejections - 35 USC § 112 Second Paragraph***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 64 recite the limitations for a “computer program product” but is dependant upon any of claims 33-47 which are method claims. There is insufficient antecedent basis for this limitation in the claim. It is suggested that claim 64 be rewritten to be an independent claim.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 33-37, 41-42, 48-52, 56-57 and 63 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1).

As per claim 33, Ahmavaara discloses:

- ***A method for giving to at least one user access to a respective home operator over a communication network, access being via an access network and through any of a plurality of supported visited networks***, (Ahmavarra, Fig. 1 and Page 2, Paragraph [0020], “The access network may route the connection of the UE to at least one other network associated with the at least one access network identification.” ... “The at least one other network may be a roaming PLMN network connected to a home PLMN network.”).
- ***forwarding to the at least one user a list of said supported visited networks***, (Ahmavarra, Page 1, Paragraph [0010] and Page 4, Paragraph [0078], “The identification of the roaming network may be transmitted from the wireless access network to the UE for storage and may be in response to a solicitation by the user equipment of an identification the roaming network.”).
- ***said at least one user is given the possibility of selecting one of said supported visited networks as the path for reaching said respective home operator***. (Ahmavarra, Page 1, Paragraph [0011], Page 3, Paragraph [0030] and Page 4, Paragraph [0078], “The UE supporting network selection may implement automatic or/and manual selection of a roaming network.”).

As per claim 34, the rejection of claim 33 is incorporated and further Ahmavaara discloses:

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- **receiving from said at least one user, user credentials at said access network;** (Ahmavaara, Page 1, Paragraph [0013], Page 3, Paragraph [0032] and Page 4, Paragraph [0088] and Pages 4-5, Paragraph [0090]), Ahmavaara teaches the user sending its credentials to the access network.
- **forwarding said user credentials to an authentication function at said access network;** (Ahmavaara, Page 3, Paragraph [0032] and Page 4, Paragraphs [0088]-[0089], "RADIUS proxies receiving the above user NAI, check from their "RADIUS routing tables" for the forwarding of the message." ... "When the RADIUS Access Request reaches the RADIUS server identified ... the RADIUS server strips away the inserted part and performs the authentication of the user based on the remaining NAI.").
- **retrieving a set of available roaming networks for said at least one user, thus retrieving a list of operators holding a roaming agreement with said respective home operator of said at least one user;** (Ahmavaara, Fig.1 and Pages 2-3, Paragraph [0026], "The communication of the SSID's from visited PLMN's 1 and 3 to the visited PLMN2 is illustrated as the arrows SSID PLMN1 and SSID PLMN2 being transmitted to the visited PLMN2. The visited PLMN2 transmits the identity SSIDs of the visited PLMN1 and the PLMN2 to the WLAN access zone. Also, the identity of SSID of the PLMN3 is passed directly to the WLAN access zone.").
- **forwarding said list to said at least one user.** (Ahmavaara, Page 1, Paragraph [0010] and Page 3, Paragraph [0027], "The information about available backbone networks is communicated by the WLAN AP to the UE in the form of WLAN SSIDs.").

As per claim 35, the rejection of claim 34 is incorporated and further Ahmavaara discloses:

- **receiving from said at least one user at said authentication function an identifier of an operator selected from said list;** (Ahmavarra, Page 1, Paragraph [0013], Page 3, Paragraph [0032] and Pages 4, Paragraphs [0080] and [0082], "If the WLAN UE supports the roaming network selection, the UE may select to which of the available backbone networks the WLAN AN may direct the user.").

- ***forwarding to the operator identified by said identifier a user's authentication request.*** (Ahmavarra, Page 3, Paragraph [0032] and Page 4, Paragraphs [0088]-[0089]).

As per claim 36, the rejection of claim 35 is incorporated and further Ahmavaara discloses:

- ***including the user credentials in said user's authentication request.*** (Ahmavarra, Page 3, Paragraph [0032] and Pages 4, Paragraphs [0080] and [0088]-[0089]), Ahmavaara teaches including the user credentials in the authentication request.

As per claim 37, the rejection of claim 33 is incorporated and further Ahmavaara discloses:

- ***assigning to said at least one user an NAI identifier;*** (Page 4, Paragraphs [0079]-[0086]), Ahmavaara teaches assigning the user a network access identifier.
- ***identifying said at least one user through the realm part of said NAI identifier.*** (Page 4, Paragraphs [0079]-[0086]), Ahmavaara teaches identifying the user using the realm portion of the network access identifier.

As per claim 41, the rejection of claim 35 is incorporated and further Ahmavaara discloses:

- ***proxying said user's authentication request from said operator identified by said identifier to said user's respective home operator.*** (Ahmavaara, Fig. 1, Page 3, Paragraph [0032], Page 4, Paragraphs [0087]-[0089] and Page 5, Paragraph [0091], "The user authentication to be performed may still involve AAA roaming ( proxying) or mobile application part (MAP) roaming towards the users home network.").

As per claim 42, the rejection of claim 34 is incorporated and further Ahmavaara discloses:

- ***selecting said authentication function as an EAP based function.*** (Ahmavaara, Page 4, Paragraphs [0080] and [0085]-[0086] and [0089]), Ahmavaara

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teaches using an authentication function based on Extensible Authentication Protocol.

Claim 48 is the network claim corresponding to claim 33 and is rejected under the same reasons set forth in connection of the rejection of claim 33.

Claim 49 is the network claim corresponding to claim 34 and is rejected under the same reasons set forth in connection of the rejections of claim 34.

Claim 50 is the network claim corresponding to claim 35 and is rejected under the same reasons set forth in connection of the rejection of claim 35.

Claim 51 is the network claim corresponding to claim 36 and is rejected under the same reasons set forth in connection of the rejection of claim 36.

Claim 52 is the network claim corresponding to claim 37 and is rejected under the same reasons set forth in connection of the rejection of claim 37.

Claim 56 is the network claim corresponding to claim 41 and is rejected under the same reasons set forth in connection of the rejection of claim 41.

Claim 57 is the network claim corresponding to claim 42 and is rejected under the same reasons set forth in connection of the rejection of claim 42.

As per claim 63, the rejection of claim 48 is incorporated and further Ahmavaara discloses:

- ***in the form of an IP network*** (Ahmavaara, Abstract and Page 1, Paragraph [0011] – Page 2, Paragraph [0021]), Ahmavaara teaches the network being an internet protocol (IP) network.

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13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1) in view of Thomas (US Patent No. 6,421,339 B1).

As per claim 38, the rejection of claim 34 is incorporated; however, Ahmavaara does not specifically disclose:

- ***said steps of receiving and forwarding user credentials and retrieving a set of available roaming networks is performed only once, when a first authentication request is received by said authentication function in respect to a user for which no direct roaming agreements exist with said user's respective home operator.***

However, Thomas in an analogous art discloses the above limitation. (Thomas, Column 3, Line 60 – Column 4, Line 30 and Column 6, Lines 20-42, “After arriving at the visited network, the roaming user registers with a visited gatekeeper. The visited gatekeeper authorizes the registration by determining the network of the roaming user and that a roaming agreement exists between the visited and home network.”), Thomas teaches that the user credentials are authenticated and if no direct roaming agreement exists, the user is not allowed to roam and no further action occurs.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Thomas into the method of Ahmavaara to forward user credentials and retrieve a set of available roaming networks only once when no direct roaming agreement exists. The modification would be obvious because one of ordinary skill in the art would want to only allow users

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authorized to roam within a visited network the ability to roam. (Thomas, Column 6, Lines 20-42).

Claim 53 is the network claim corresponding to claim 38 and is rejected under the same reasons set forth in connection of the rejection of claim 38.

Claims 39 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1).

As per claim 39, the rejection of claim 34 is incorporated and further Ahmavaara discloses:

- ***said access network has a direct roaming agreement with said user's respective home operator, comprising the step of forwarding to said at least one user a list including said user's respective home operator only.*** (Ahmavaara, Fig. 1, Page 1, Paragraphs [0009]-[0014], Pages 2-3, Paragraph [0026] and Page 4, Paragraphs [0060]-[0065] and [0076], "The UE always tries first to connect directly to the home network which is Home PLMN 4 which includes the UE's home location register (HLR)."), Ahmavaara discloses that an order of connection may be used by a user in selecting a network. Only if the home network is not available does the user try to connect to visited networks broadcast by the access point.

As the user always tries to connect to the home network first, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the list provided by the access point contain only the identification of the home network when a direct roaming agreement exists with the user's home network.

Claim 54 is the network claim corresponding to claim 39 and is rejected under the same reasons set forth in connection of the rejection of claim 39.

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Claims 40 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1) in view of Basilier et al (Basilier) (US Patent No. 6,728,536 B1).

As per claim 40, the rejection of claim 34 is incorporated and further Basilier discloses:

- ***said access network has a direct roaming agreement with said user's respective home operator, comprising the step of directly forwarding the user's authentication request to said user's respective home operator.*** However, Basilier in an analogous art discloses the above limitation. (Basilier, Column 1, Lines 38-48 and Column 5, Line 60 –Column 6, Line 30, “For the example given above wherein the AAA-F 118 contains roaming information regarding the mobile terminal 102, the AAA-F 118 would analyze the received IMSI digits in the NAI and through internal tables locate the appropriate AAA-H 110.”), Basilier teaches that when a roaming agreement exists between the access and home network, the authentication request is routed to the home network for authentication.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Basilier into the method of Ahmavaara to route an authentication request to the home network when a direct roaming agreement exists. The modification would be obvious because one of ordinary skill in the art would only want an efficient way to transmit access specific information from an access network to a home network. (Basilier, Column 1, Lines 9-14).

Claim 55 is the network claim corresponding to claim 40 and is rejected under the same reasons set forth in connection of the rejection of claim 40.

Claims 43-47 and 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1), in view of technical standard entitled “Diameter Base Protocol”

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dated December 2002 by Pat R. Calhoun, John Loughney, Erik Guttman, Glen Zorn and Jari Arkko, AAA Working Group (Diameter).

As per claim 43, the rejection of claim 33 is incorporated; however, Ahmavaara does not specifically disclose:

- ***including in at least one of said access network and said supported visited networks a Diameter node.*** However, Diameter in an analogous art discloses the above limitation. (Diameter, Page 14, Sections: Diameter Node, Diameter Agent, Diameter Client and Diameter Server), Diameter teaches that a Diameter node may be a part of the access and visited networks by disclosing that a node may be a client, agent or server.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Diameter Base Protocol standard into the method of Ahmavaara to include a Diameter node in an access and supported visited network. The modification would be obvious because one of ordinary skill in the art would only want a secure way to communicate data across networks. (Diameter, Page 15, Section: End-to-End Security).

As per claim 44, the rejection of claim 33 is incorporated and further Diameter discloses:

- ***including in at least one of said access network and said supported visited networks a proxy/relay agent.*** (Diameter, Page 14, Sections: Diameter Agent and Diameter Node, Page 15, Section: Proxy Agent or Proxy, Page 16, Section: Relay Agent or Relay and Page 24, Section 2.8 - Page 26, Section 2.8.2, "Relay Agents are Diameter agents that accept requests and route messages to other Diameter nodes based on information found in the messages (e.g. Destination-Realm)." ... "Similarly to relays, proxy agents route Diameter messages using the Diameter Routing Table."), Diameter teaches both relay and proxy agents as part of the access and visited networks.

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Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Diameter Base Protocol standard into the method of Ahmavaara to include a proxy/relay agent in an access and supported visited network. The modification would be obvious because one of ordinary skill in the art would only want way to route messages from multiple authentication sources to the appropriate destination in a secure manner. (Diameter, Pages 24-25, Section 2.8).

As per claim 45, the rejection of claim 33 is incorporated and further Diameter discloses:

- ***including in at least one of said supported visited networks, a redirect agent.*** (Diameter, Page 14, Sections: Diameter Agent and Diameter Node, Page 16, Section: Redirect Agent, Pages 24-25, Section 2.8 and Pages 26-27, Section 2.8.3, “[R]edirect agents do not relay messages, and only return an answer with the information necessary for Diameter agents to communicate directly[.]”), Diameter teaches a redirect agent as part of a visited network.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Diameter Base Protocol standard into the method of Ahmavaara to include a redirect agent into a supported visited network. The modification would be obvious because one of ordinary skill in the art would only want a way to allow clients and servers to communicate directly as well as provide an alternate route for messages of certain types. (Diameter, Page 16, Section: Redirect Agent).

As per claim 46, the rejection of claim 35 is incorporated and further claim 46 is rejected under the same reasons set forth in connection of the rejections of claims 44-45.

As per claim 47, the rejection of claim 46 is incorporated and further Ahmavaara discloses:

- ***redirecting to all said supported visited networks the authentication requests whose realm does not correspond to any realm identified at said access network; and returning from said supported visited networks to said access network redirect notifications as well as contact information to said user's respective home operator.*** (Diameter, Figure 3 and Pages 26-27, Section 2.8.3, "The message is forwarded by the NAS to its relay, DRL, which does not have a routing entry in its Diameter Routing Table for example.com. DRL has a default route configured to DRD, which is a redirect agent that returns a redirect notification to DRL, as well as HMS' contact information. Upon receipt of the redirect notification, DRL establishes a transport connection with HMS, if one doesn't already exist, and forwards the request to it.").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Diameter Base Protocol standard into the method of Ahmavaara to redirect authentication requests with an unknown realm. The modification would be obvious because one of ordinary skill in the art would only want to be able to route messages which do not have an entry within the Diameter Routing Table. (Diameter, Pages 26-27, Section 2.8.3).

Claim 58 is the network claim corresponding to method claim 43 and is rejected under the same reasons set forth in connection of the rejection of claim 43.

Claim 59 is the network claim corresponding to method claim 44 and is rejected under the same reasons set forth in connection of the rejection of claim 44.

Claim 60 is the network claim corresponding to method claim 45 and is rejected under the same reasons set forth in connection of the rejection of claim 45.

Claim 61 is the network claim corresponding to method claims 44 and 45 and is rejected under the same reasons set forth in connection of the rejections of claims 44 and 45.

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Claim 62 is the network claim corresponding to claim 47 and is rejected under the same reasons set forth in connection of the rejection of claim 47.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmavaara et al (Ahmavaara) (US Patent Publication No. 2004/0066756 A1) in view of Thomas (US Patent No. 6,421,339 B1) in view of Basilier et al (Basilier) (US Patent No. 6,728,536 B1) and in further view of technical standard entitled "Diameter Base Protocol" dated December 2002 by Pat R. Calhoun, John Loughney, Erik Guttman, Glen Zorn and Jari Arkko, AAA Working Group (Diameter).

As per claim 64, the rejections of claims 33-47 are incorporated and further Ahmavaara discloses:

- ***A computer program product capable of being loadable in the memory of at least one computer and including software code portions for performing the steps of any one of claims 33 to 47.*** (Ahmavaara, Abstract and Page 1, Paragraphs [0010]-[0014], "The UE selects the backbone network based on the available SSIDs. SSIDs containing a PLMN-ID may be linked to branded networks based on the information stored in WLAN UE client software.").

### **Conclusion**

14. The prior art not relied upon but considered pertinent to applicant's disclosure is made of record and listed on form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANGELA T. CHAMBERS whose telephone number is 571-270-3168. The examiner can normally be reached Monday through Thursday, 8:30am-6pm Eastern Time.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das, can be reached at 571-270-1392. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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April 23, 2008

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